

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,059,466 B2  
APPLICATION NO. : 10/763893  
DATED : June 13, 2006  
INVENTOR(S) : Lees et al.

Page 1 of 19

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

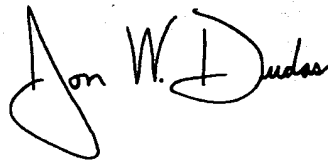
Item [75] Please insert

Inventors: Thomas S. Breidenbach, Maple Grove, MN, John N. Lees, Golden Valley, MN, Terry B. Berglin, North Maple Grove, MN, Andrew J. Dahl, Minneapolis, MN, Terry Erickson, St. Paul, MN, Gregory A. Reed Cottage Grove, MN, and Michael Robertson, Roseville, MN

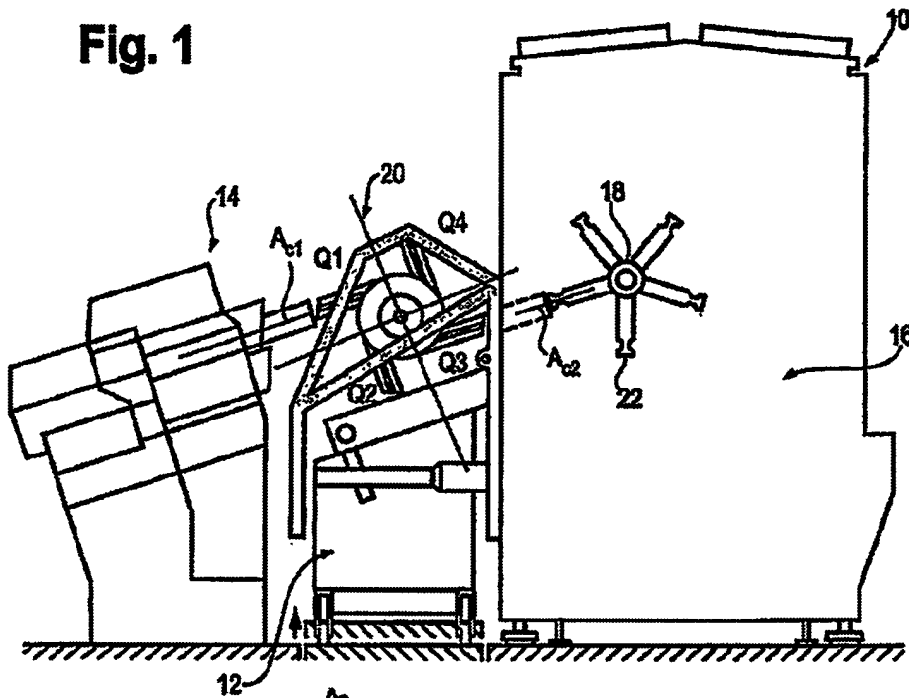
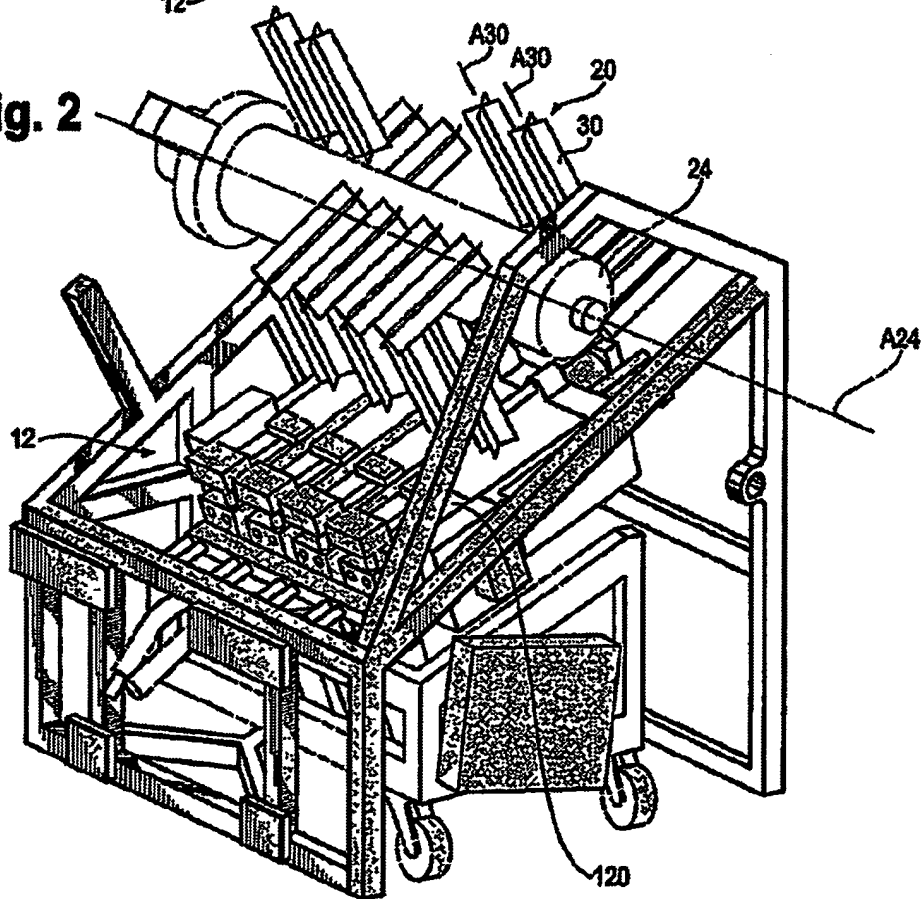
Delete old drawings and replace with these new drawings  
Eighteen (18) sheets

Signed and Sealed this

Sixteenth Day of January, 2007

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized with a large, looped initial "J" and a cursive "Dudas".

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*

**Fig. 1****Fig. 2**

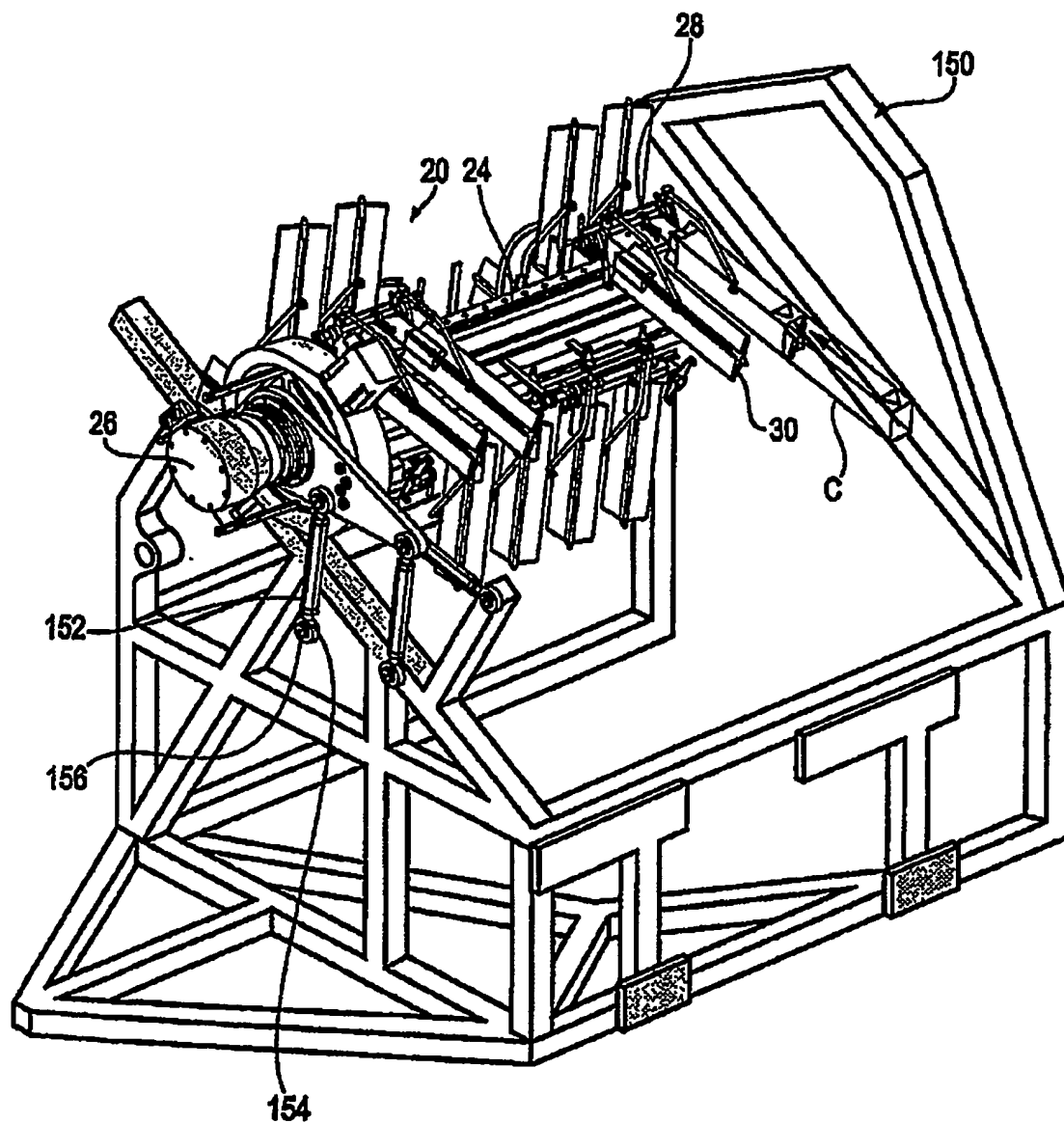
**Fig. 3**

Fig. 4B

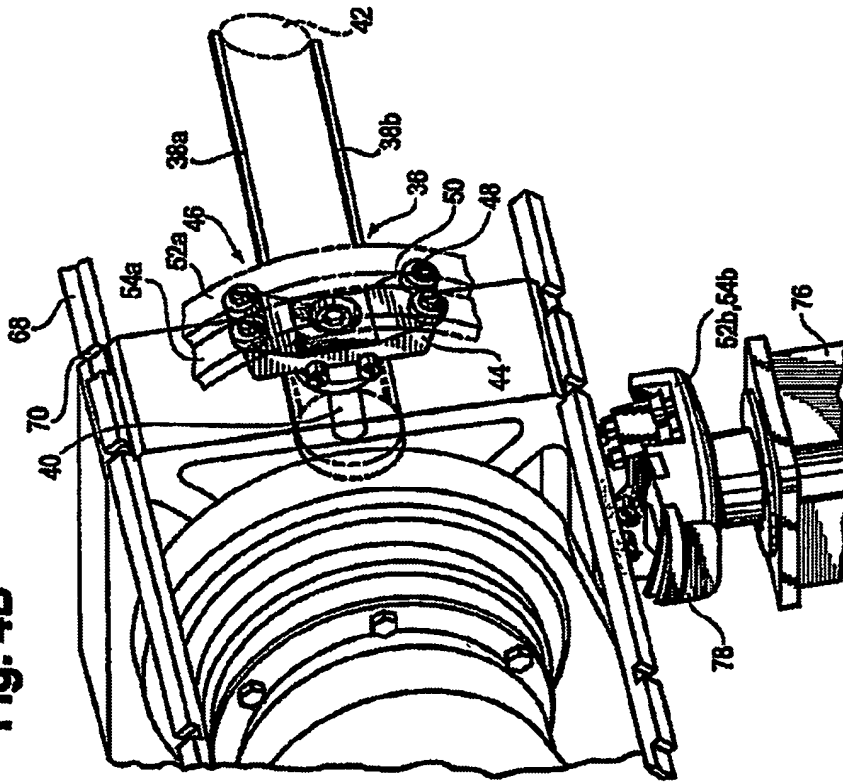
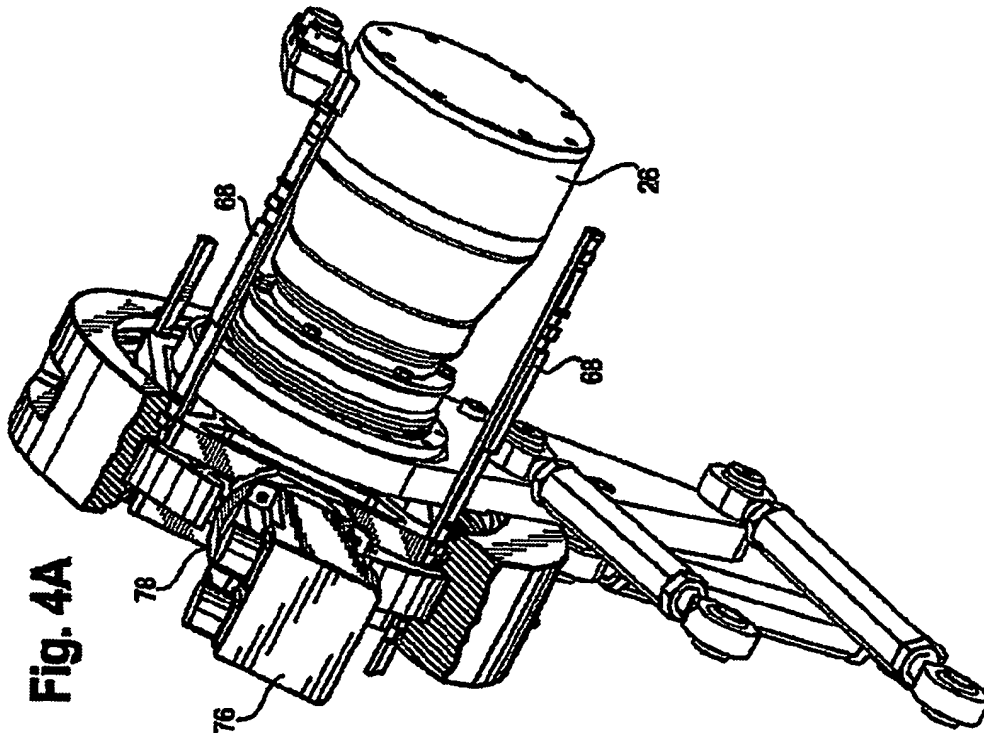
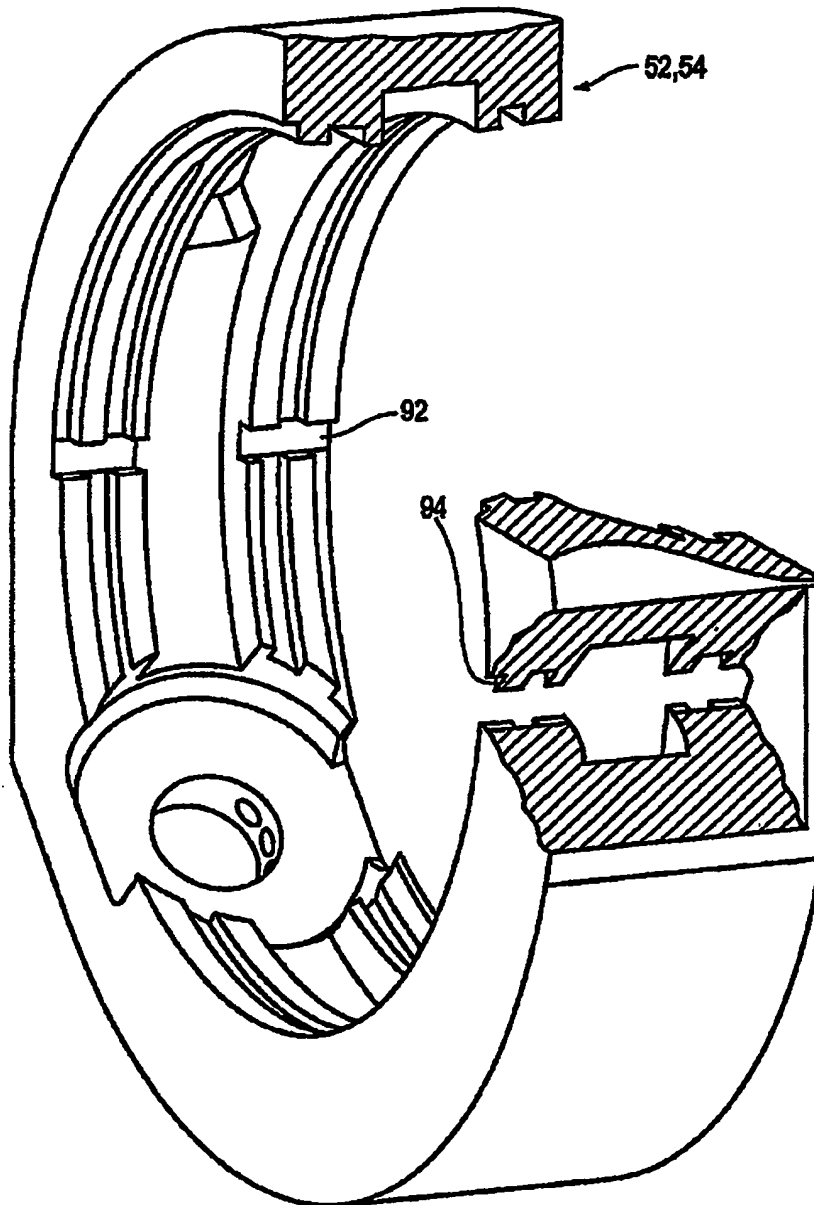


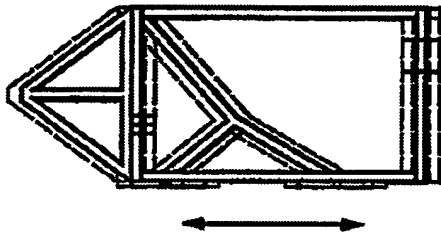
Fig. 4A



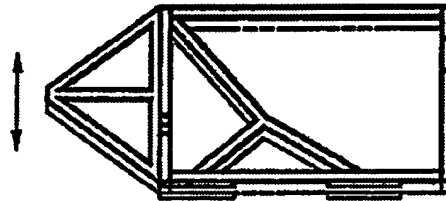
**Fig. 4C**



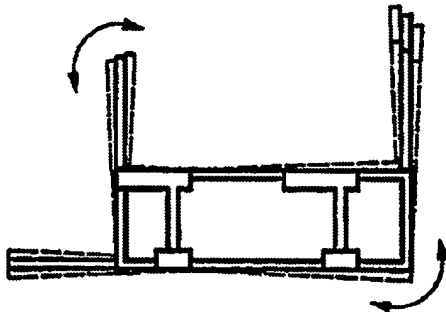
**Fig. 5**



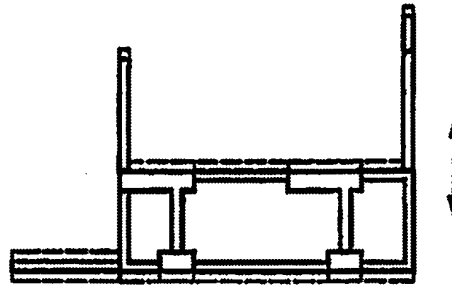
**Fig. 6**



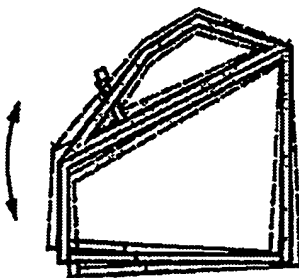
**Fig. 7**



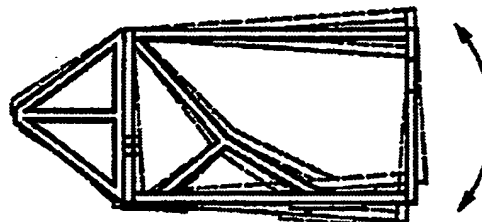
**Fig. 8**



**Fig. 9**



**Fig. 10**



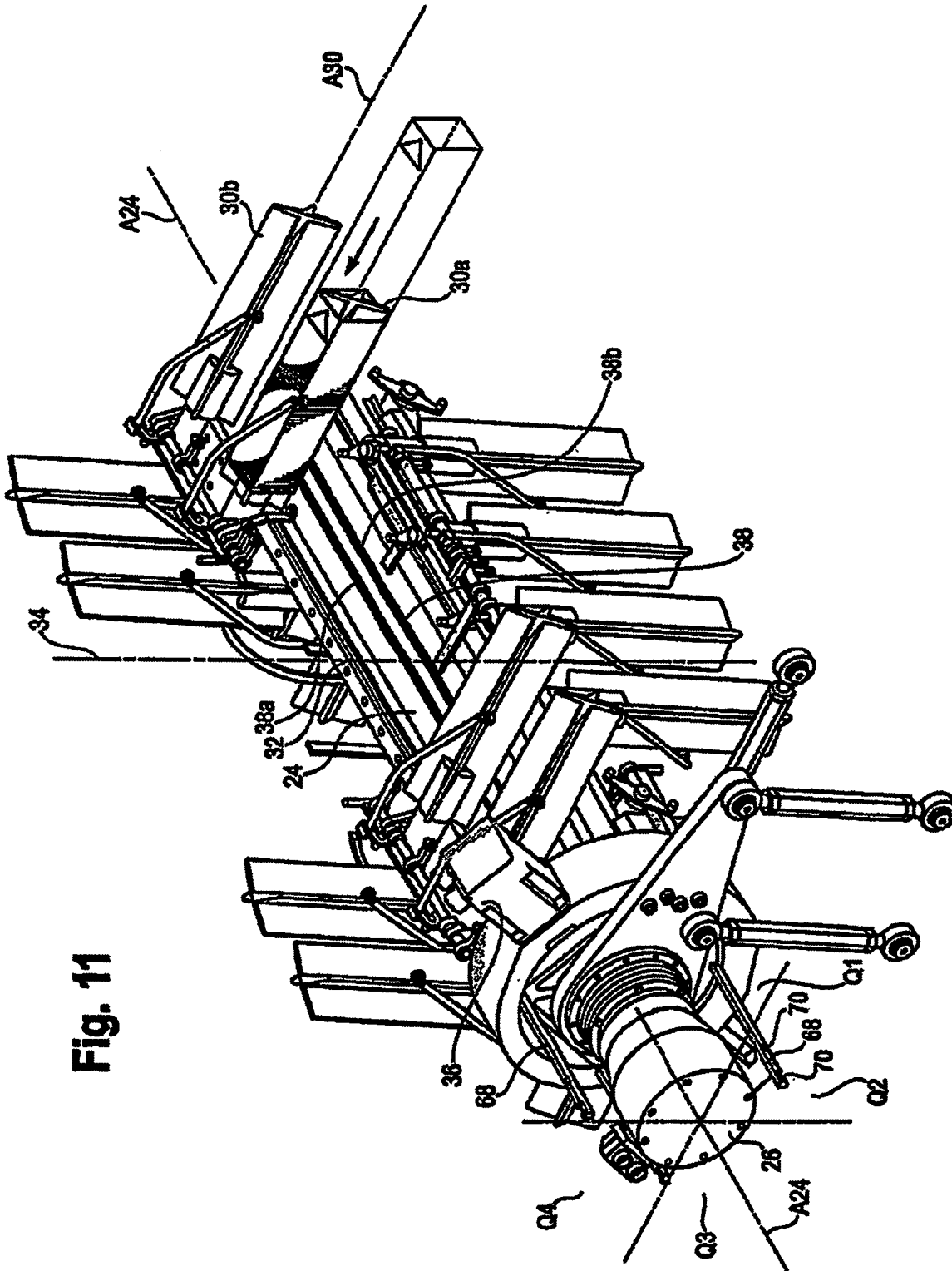


Fig. 11

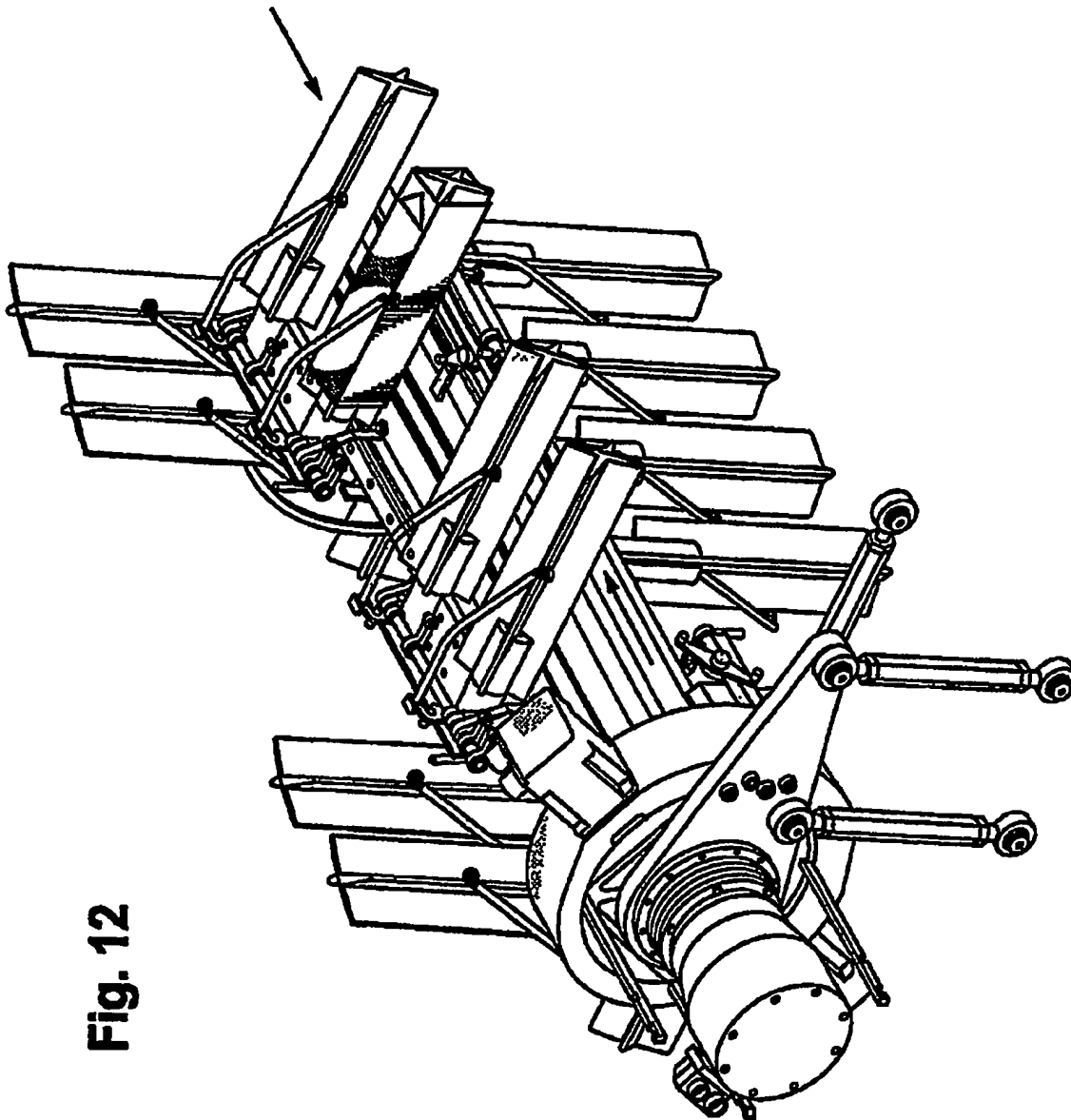


Fig. 12



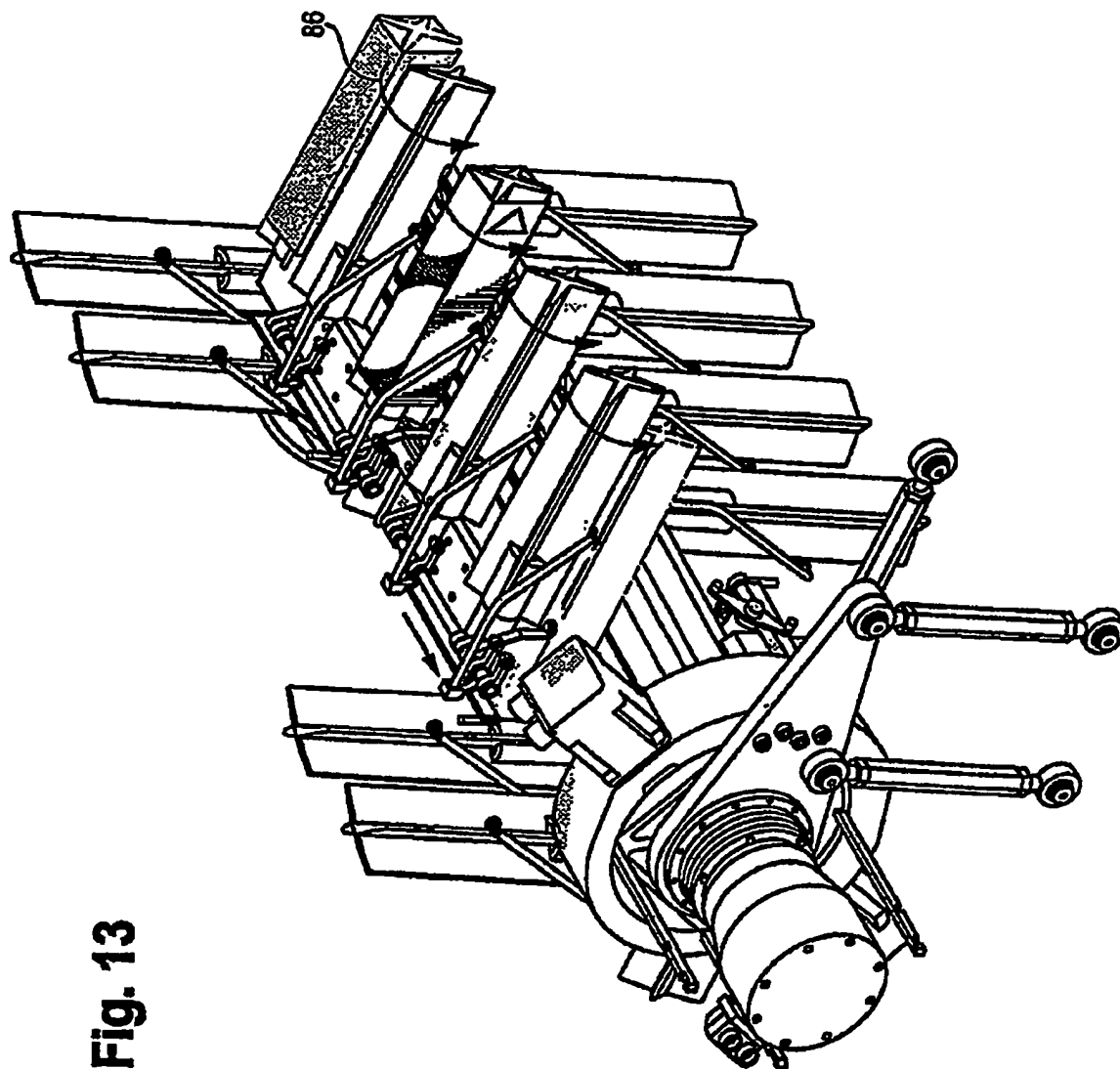


Fig. 13

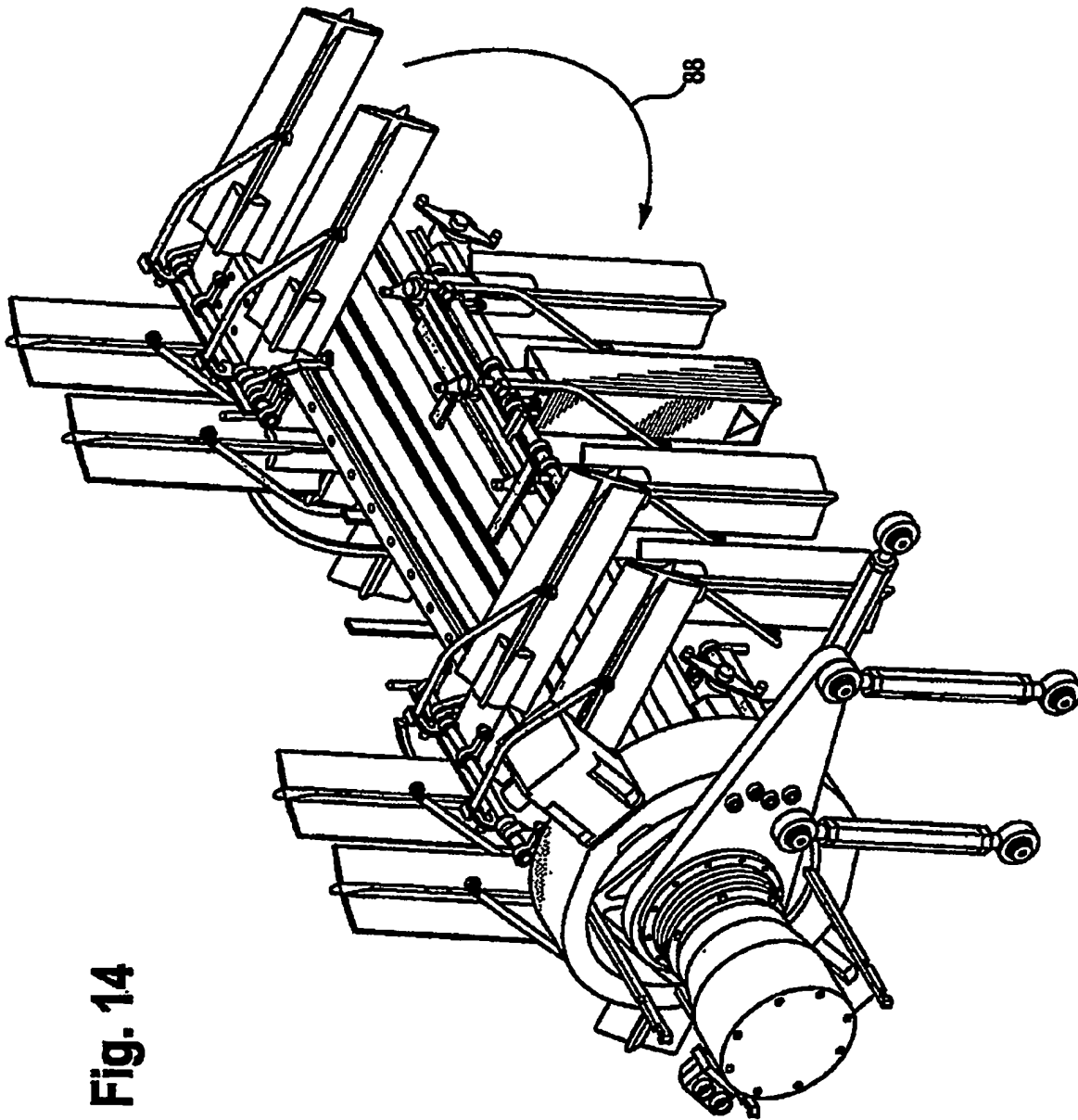
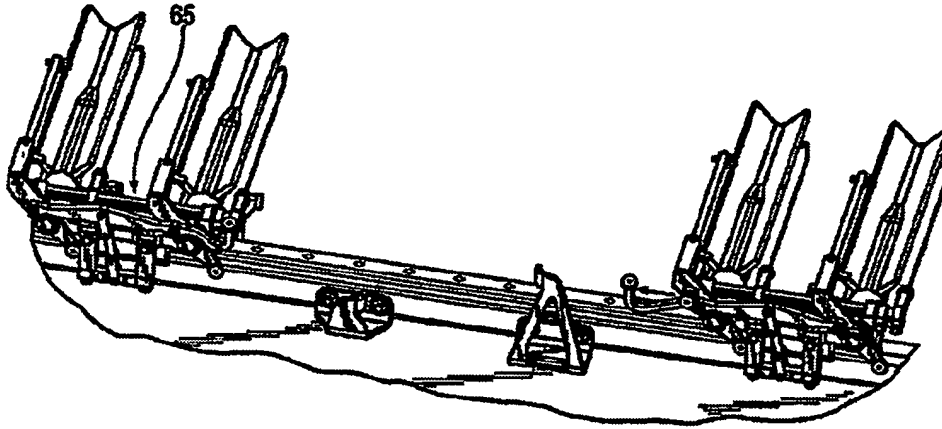
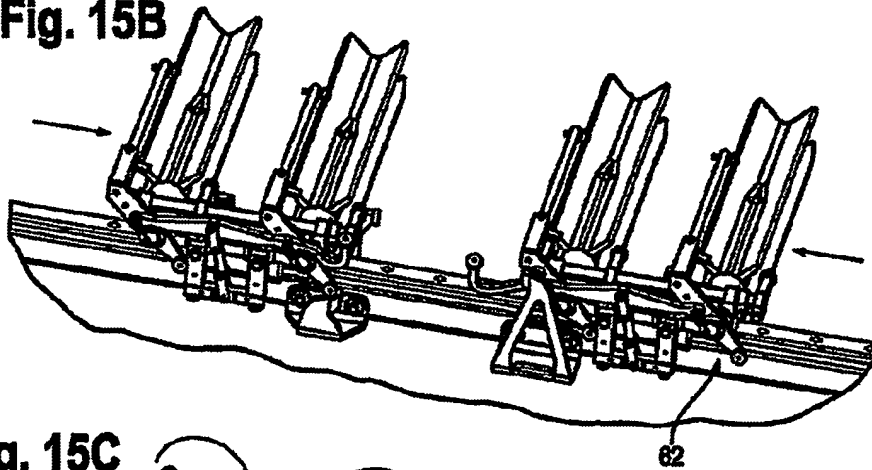


Fig. 14

**Fig. 15A**



**Fig. 15B**



**Fig. 15C**

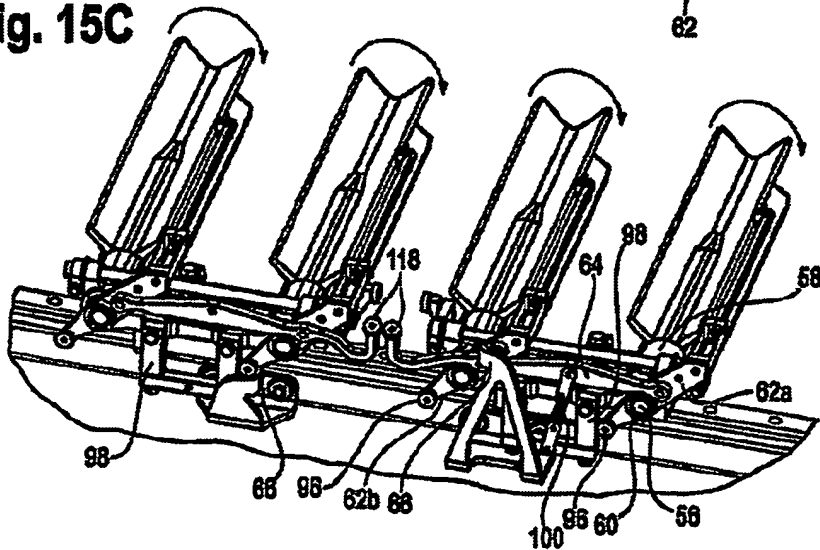


Fig. 15D

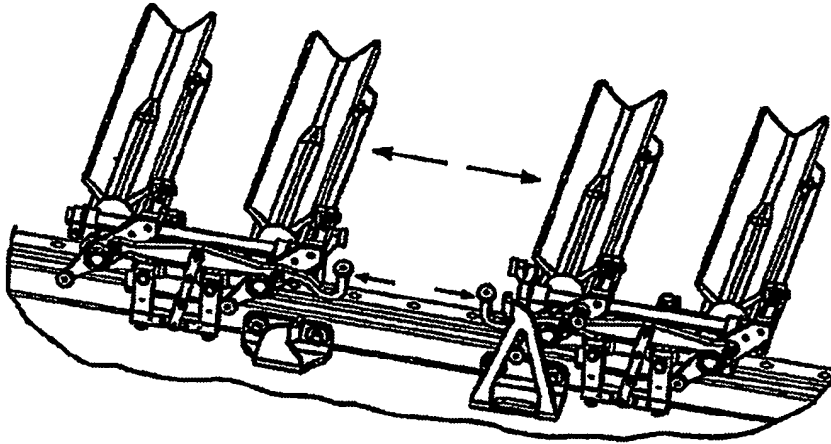


Fig. 15E

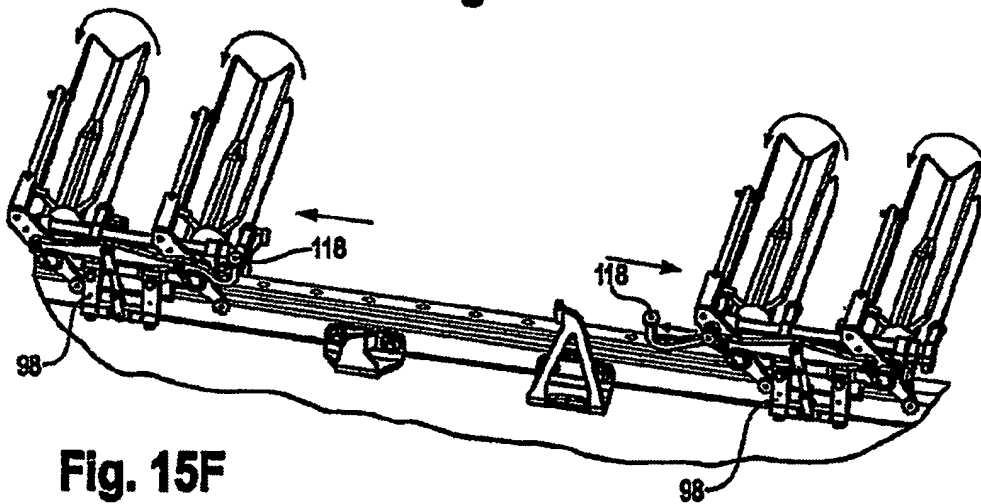
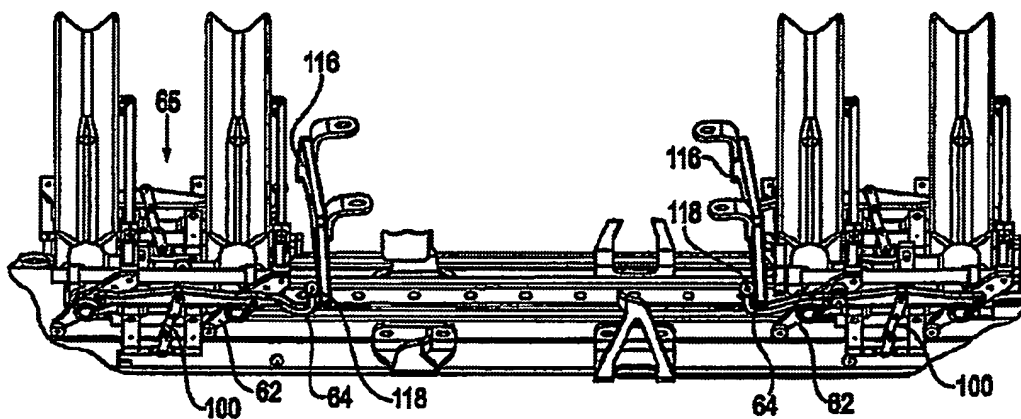
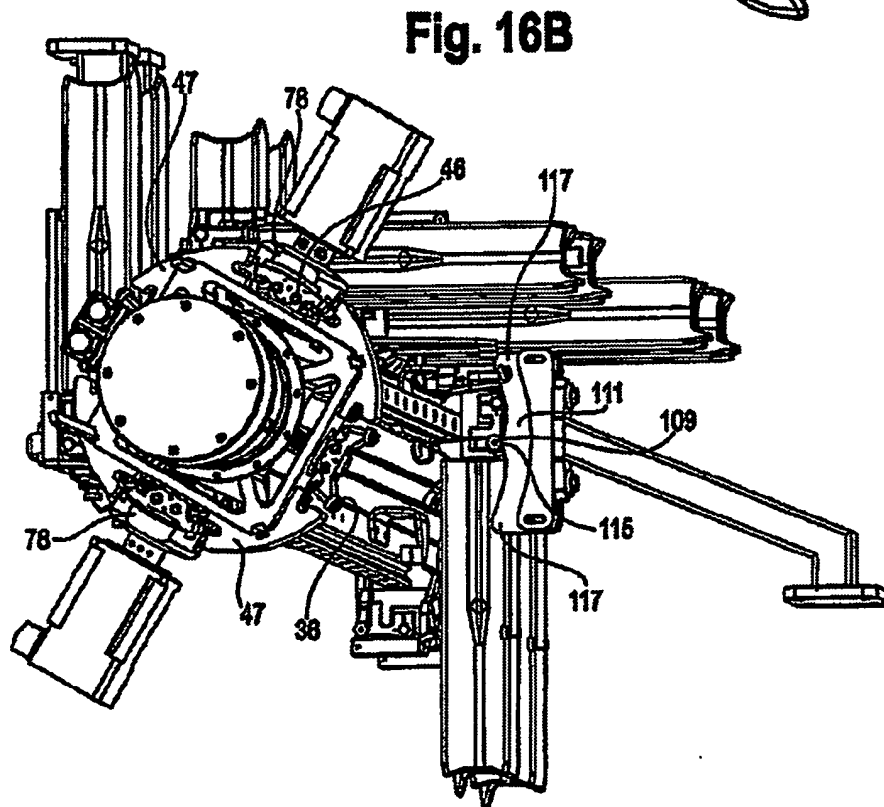
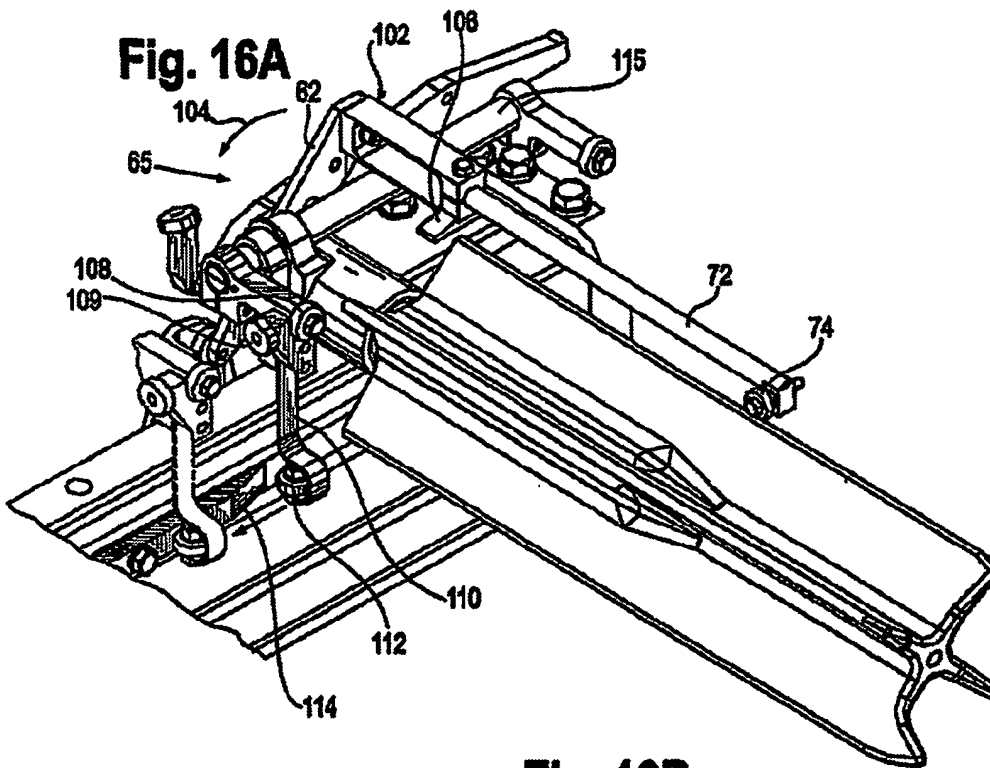
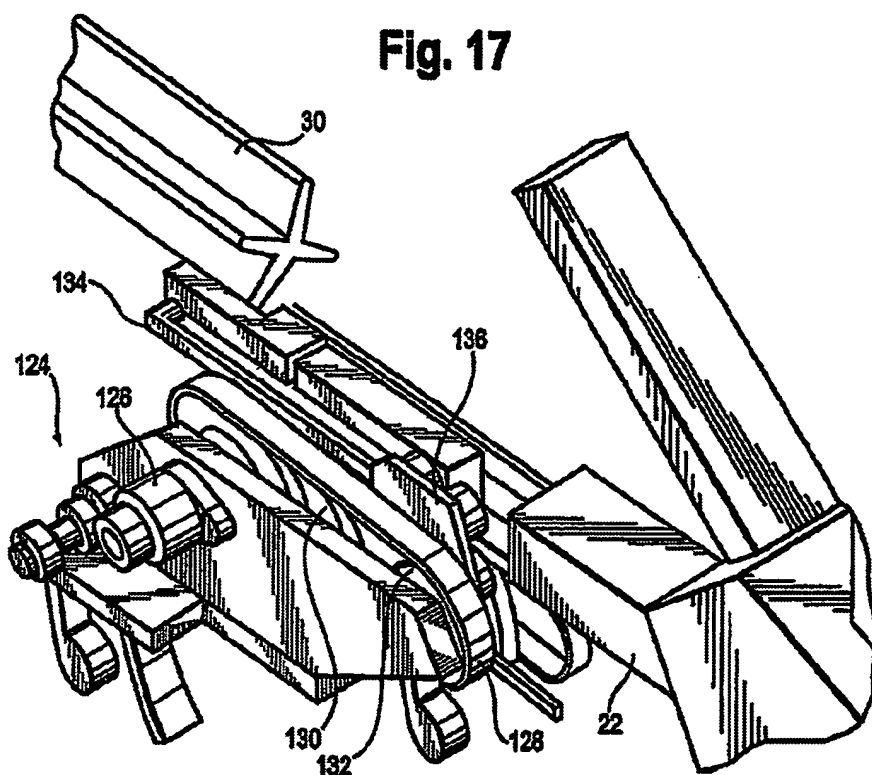


Fig. 15F





**Fig. 17**



**Fig. 18**

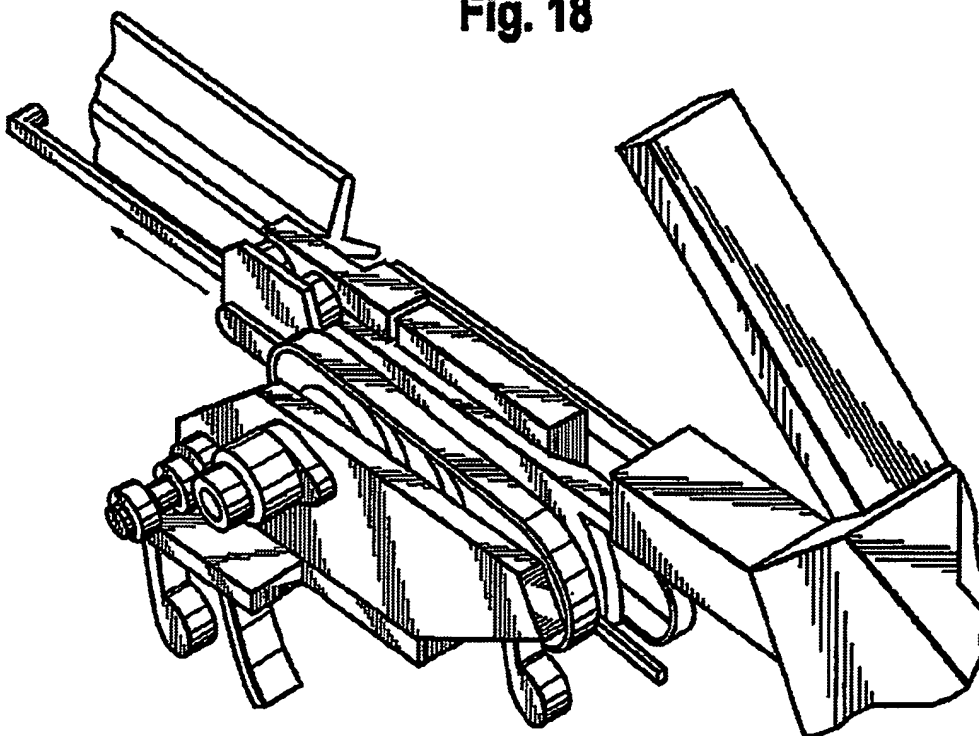


Fig. 19

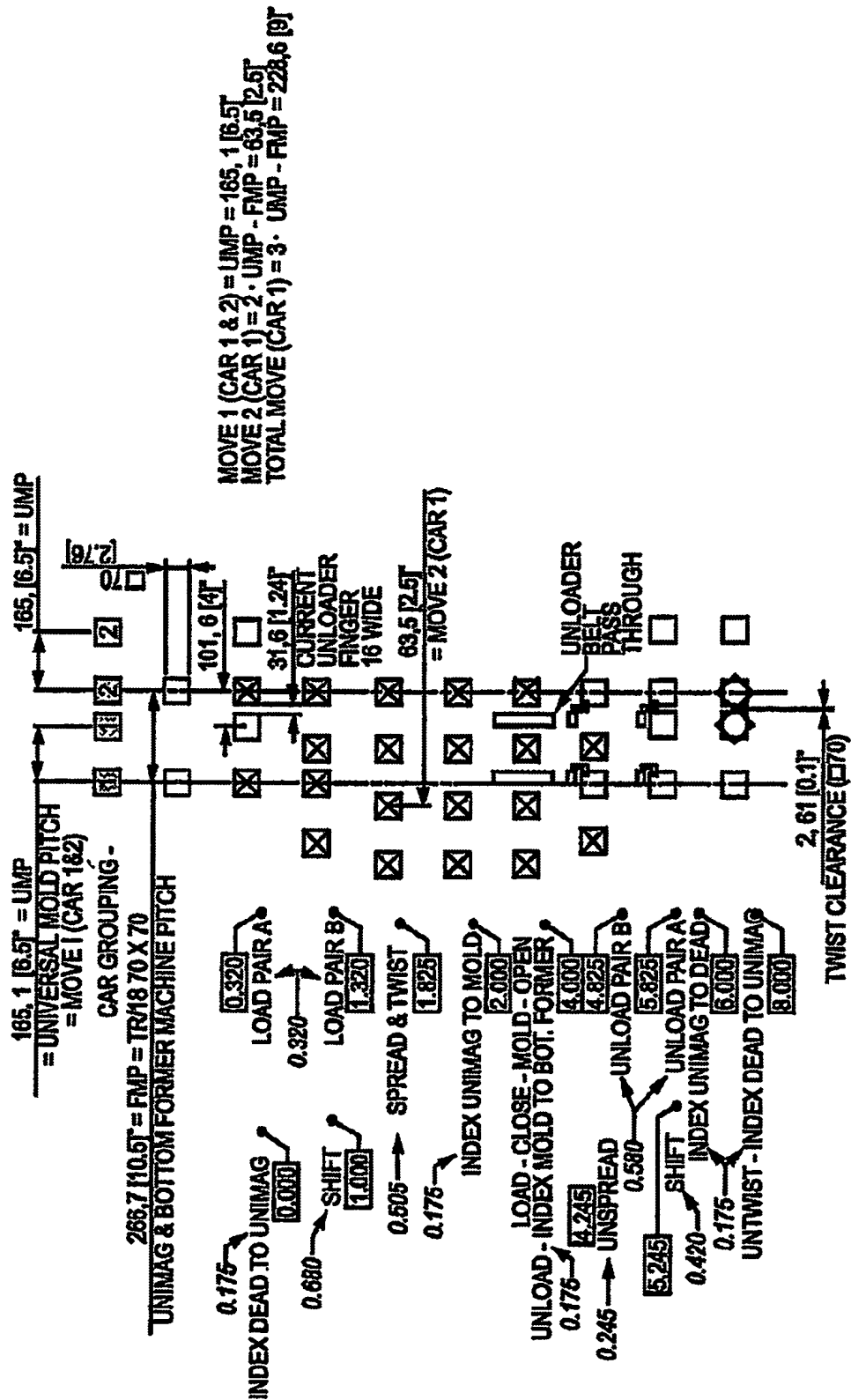


Fig. 20

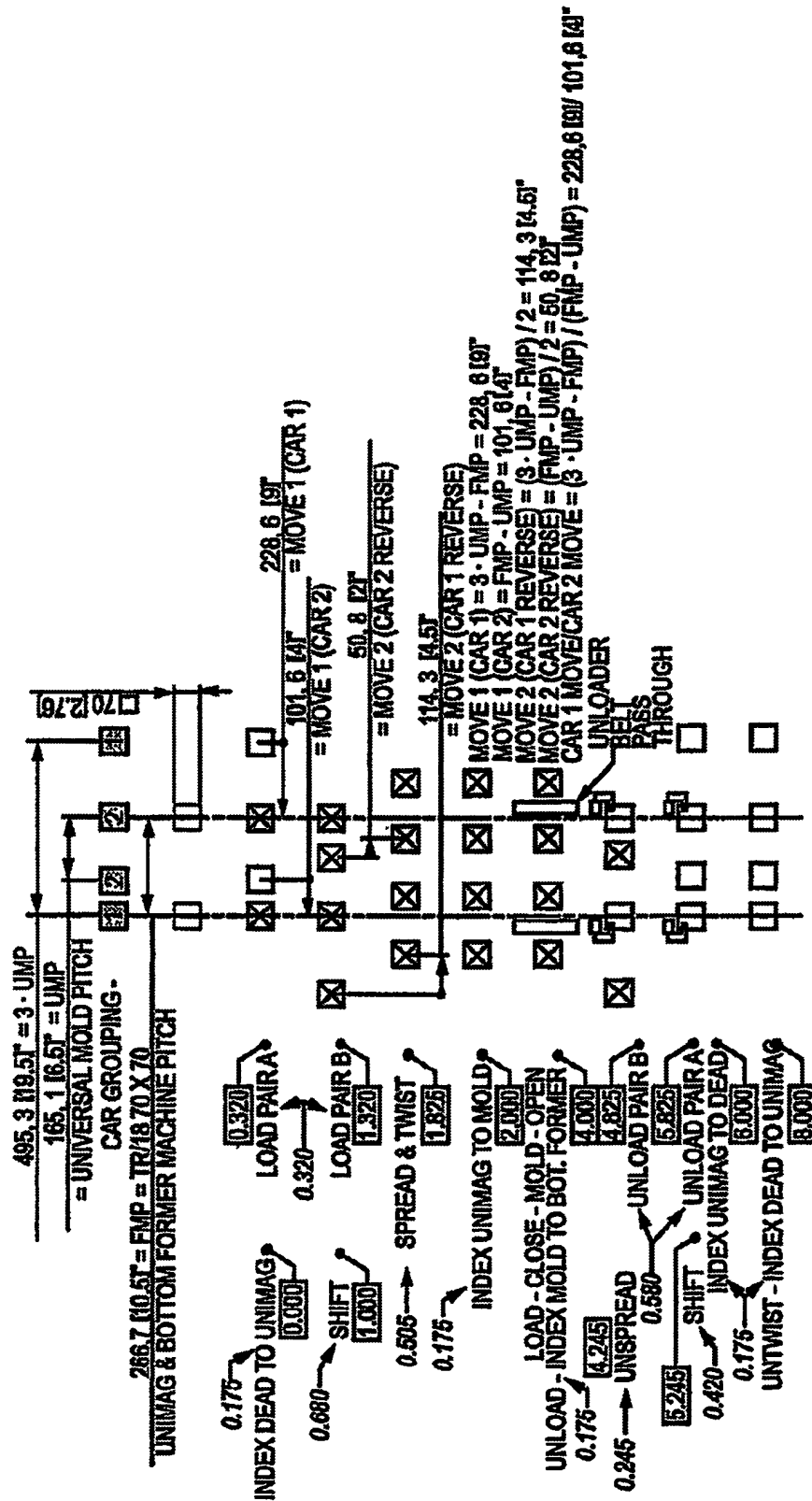
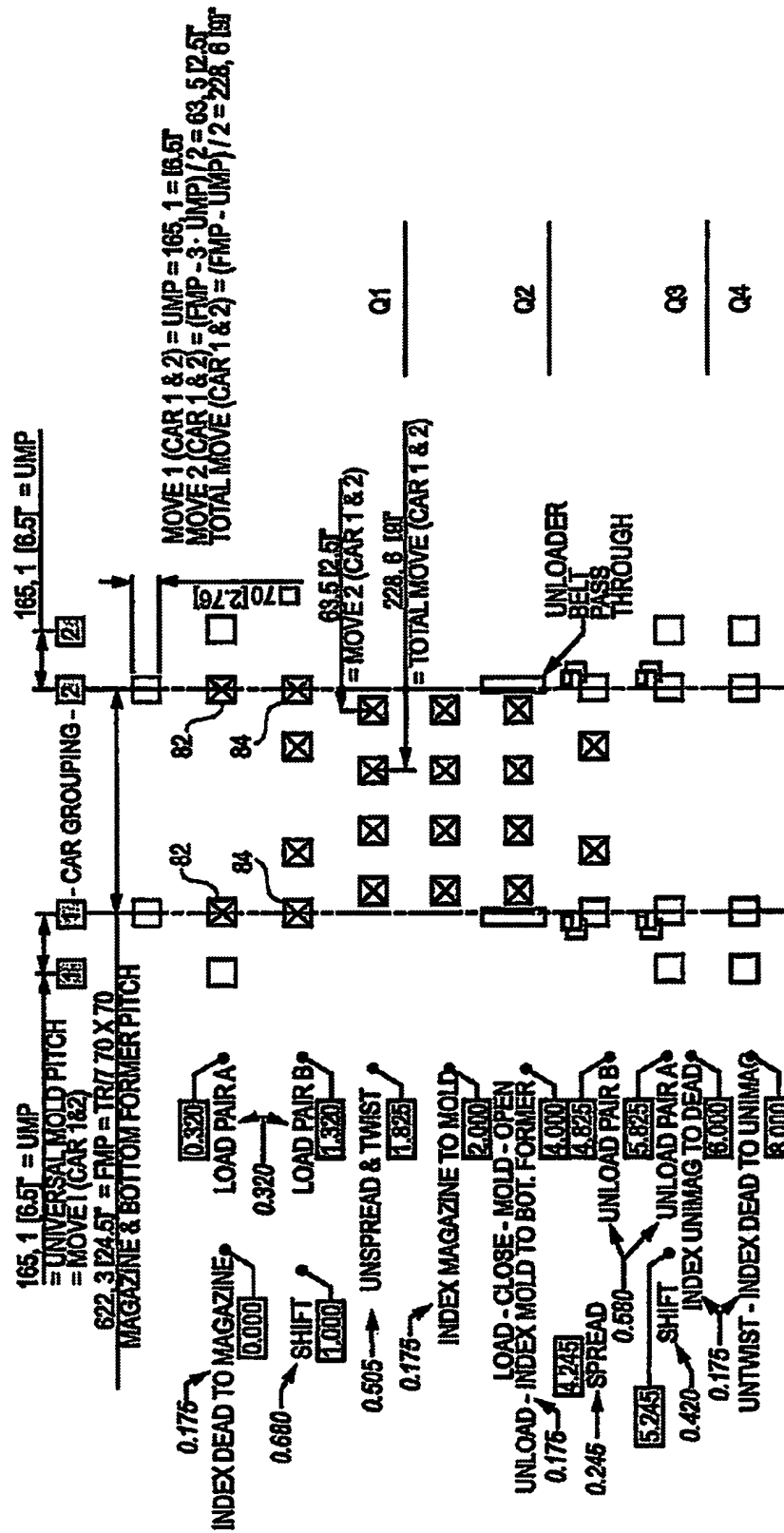




Fig. 21





495.3 [19.5"] = 3 · UMP  
185.1 [6.5"] = UMP  
= UNIVERSAL MOLD PITCH

CAR GROUPING -

342.9 [13.5"] = FMP = TR17 & 18 MAX 95 X  
95 UNIMAG & BOTTOM FORMER MACHINE PITCH

INDEX DEAD TO UNIMAG 0.175  
SHIFT 0.000  
LOAD PAIR A 0.320  
LOAD PAIR B 1.320  
SPREAD & TWIST 0.505  
INDEX UNIMAG TO MOLD 0.175  
LOAD - CLOSE - MOLD - OPEN 2.000  
UNLOAD - INDEX MOLD TO BOT. FORMER 0.175  
UNSPREAD 0.245  
UNLOAD PAIR B 4.000  
UNLOAD PAIR A 5.825  
SHIFT 0.420  
INDEX UNIMAG TO DEAD 0.175  
UNTWIST - INDEX DEAD TO UNIMAG 8.000

152.4 [6"] = MOVE 1 (CAR 1)  
177.8 [7"] = MOVE 1 (CAR 2)  
76.2 [3"] = MOVE 2 (CAR 1 REVERSE)  
88.9 [3.5"] = MOVE 2 (CAR 2 REVERSE)  
MOVE 1 (CAR 1) = 3 · UMP - FMP = 152.4 [6"]  
MOVE 1 (CAR 2) = FMP - UMP = 177.8 [7"]  
MOVE 2 (CAR 1 REVERSE) = (3 · UMP - FMP) / 2 = 76.2 [3"]  
MOVE 2 (CAR 2 REVERSE) = (FMP - UMP) / 2 = 88.9 [3.5"]  
CAR 1 MOVE / CAR 2 MOVE = (3 · UMP - FMP) / (FMP - UMP) = 152.4 [6"] / 177.8 [7"]

UNLOADER  
BELL  
PASS  
THROUGH

30.75 [1.21"]  
TWIST CLEARANCE (□85)